

ABSTRACT

Modulated signal A is transmitted from a first antenna, and modulated signal B is transmitted from a second antenna. As modulated signal B, modulated symbols 5 $S_2(i)$ and $S_2(i+1)$ obtained from different data are transmitted at time i and time $i+1$ respectively. In contrast, as modulated signal A, modulated symbols $S_1(i)$ and $S_1(i)'$ obtained by changing the signal point arrangement of the same data are transmitted at time i 10 and time $i+1$ respectively. As a result the reception quality can be changed intentionally at time i and time $i+1$, and therefore using the demodulation result of modulated signal A of a time when the reception quality is good enables both modulated signals A and B to be 15 demodulated with good error rate performances.